

**AMENDMENTS TO THE CLAIMS**

Please amend the claims as follows:

1. (Currently Amended) A method ~~Method~~ for detecting oscillation in a repeater system comprising:  
  
processing communication signals in a wireless communication device circuit embedded in a repeater; and  
  
using the communication signals processed at the wireless communication device circuit to determine if the repeater system is in oscillation by attempting to establish a call from the wireless communication device circuit to a base station, and determining oscillation if the call cannot be established.
2. (Canceled)
3. (Original) The method of claim 1, wherein using the wireless communication device circuit comprises:  
  
using the wireless communication device circuit to measure signal quality from the base station; and  
  
determining oscillation if the signal quality meets a certain criteria.
4. (Original) The method of claim 3, wherein determining oscillation comprises  
  
determining oscillation if the signal quality degrades below a certain level.

5. (Original) The method of claim 3, wherein determining oscillation comprises determining oscillation if the signal quality degrades from a level that existed before the repeater was used.
6. (Original) The method of claim 3, wherein using the wireless communication device circuit comprises:
- obtaining signal to noise ratio value to measure the signal quality.
7. (Original) The method of claim 1, wherein using the wireless communication device circuit comprises:
- using the wireless communication device circuit to estimate at least one open loop power control parameter;
  - establishing a communication link from the wireless communication device circuit to a base station using the estimated open loop power control parameter;
  - receiving at least one closed loop power control command from the base station; and
  - determining oscillation if the closed loop power control command is greater than a certain amount.
8. (Original) The method of claim 7, wherein using the wireless communication device circuit comprises estimating at least a required transmit power to complete the call, wherein receiving closed loop power control commands comprises receiving at least power adjustment information, and wherein determining oscillation comprises determining oscillation if the power adjustment information is greater than a certain amount.

9. (Original) The method of claim 1, further comprising:  
reducing gain of repeater if the repeater system is in oscillation.
10. (Currently Amended) Apparatus for detecting oscillation in a repeater system comprising:  
a wireless communication device circuit embedded in a repeater, wherein the wireless communication device circuit is configured to process communication signals; and  
means for using the communication signals processed at the wireless communication device circuit to determine if the repeater system is in oscillation;  
means for establishing a call from the wireless communication device circuit to a base station; and  
means for determining oscillation if the call cannot be established.
11. (Canceled)
12. (Original) The apparatus of claim 10, wherein means for using the wireless communication device circuit comprises:  
means for using the wireless communication device circuit to measure signal quality from the base station; and  
means for determining oscillation if the signal quality meets a certain criteria.
13. (Currently Amended) The apparatus of claim 12, wherein the means for determining oscillation based on signal quality is configured to determine oscillation if the signal

quality degrades below a certain level.

14. (Currently Amended) The apparatus of claim 12, wherein the means for determining oscillation based on signal quality is configured to determine oscillation if the signal quality degrades from a level that existed before the repeater was used.

15. (Original) The apparatus of claim 12, wherein means for using the wireless communication device circuit comprises:

means for obtaining signal to noise ratio value to measure the signal quality.

16. (Original) The apparatus of claim 10, wherein means for using the wireless communication device circuit comprises:

means for using the wireless communication device circuit to estimate at least one open loop power control parameter;

means for establishing a communication link from the wireless communication device circuit to a base station using the estimated open loop power control parameter;

means for receiving at least one closed loop power control command from the base station; and

means for determining oscillation if the closed loop power control command is greater than a certain amount.

17. (Currently Amended) The apparatus of claim 16, wherein means for using the wireless communication device circuit is configured to estimate at least a required transmit power to complete the call, wherein means for receiving closed loop power control commands

comprises means for receiving at least power adjustment information, and wherein the means for determining oscillation based on the closed loop power control command is configured to determine oscillation if the power adjustment information is greater than a certain amount.

18. (Original) The apparatus of claim 10, further comprising:

means for reducing gain of repeater if the repeater system is in oscillation.

19. (Currently Amended) An apparatus for detecting oscillation in a repeater system comprising:

a wireless communication device (WCD) configured to detect if the repeater system is in oscillation based on ~~communication signals processed at the WCD~~ an attempt to establish a call to a base station, wherein oscillation is detected if the call cannot be established; and

a processor coupled to the WCD, configured to reduce the gain of the repeater system if the repeater system is in oscillation.

20. (Previously Presented) The method of claim 1, wherein the using step uses the ratio of energy of a chip of a pilot signal to total interference ( $E_c/I_o$ ) obtained from the processed communication signals to determine if the repeater system is in oscillation.

21. (Currently Amended) The method of claim 1 [2], wherein the call is initiated at the wireless communication device circuit.

22. (New) A computer-readable medium comprising instructions, which, when executed by a machine, cause the machine to perform operations, the instructions comprising:
- program code to process communication signals in a wireless communication device circuit embedded in a repeater;
  - program code to attempt to establish a call from the wireless communication device circuit to a base station; and
  - program code to determine oscillation if the call cannot be established.
23. (New) A method for detecting oscillation in a repeater system comprising:
- processing communication signals from a base station in a wireless communication device circuit embedded in a repeater; and
  - using the communication signals processed at the wireless communication device circuit to determine if the repeater system is in oscillation by measuring signal quality of the communication signals from the base station, and determining oscillation if the signal quality meets a certain criteria.
24. (New) The method of claim 23, wherein oscillation is determined if the signal quality degrades below a certain level.
25. (New) The method of claim 23, wherein oscillation is determined if the signal quality degrades from a level that existed before the repeater was used.
26. (New) The method of claim 23, wherein using the wireless communication device circuit comprises:

obtaining a signal to noise ratio value to measure the signal quality.

27. (New) The method of claim 23, wherein using the wireless communication device circuit comprises:

using the wireless communication device circuit to estimate at least one open loop power control parameter;

establishing a communication link from the wireless communication device circuit to a base station using the estimated open loop power control parameter;

receiving at least one closed loop power control command from the base station; and

determining oscillation if the closed loop power control command is greater than a certain amount.

28. (New) The method of claim 27, wherein using the wireless communication device circuit comprises estimating at least a required transmit power to complete the call, wherein receiving closed loop power control commands comprises receiving at least power adjustment information, and wherein determining oscillation comprises determining oscillation if the power adjustment information is greater than a certain amount.

29. (New) The method of claim 23, further comprising:  
reducing gain of repeater if the repeater system is in oscillation.

30. (New) The method of claim 23, wherein the using step uses the ratio of energy of a chip of a pilot signal to total interference ( $E_c/I_o$ ) obtained from the processed communication signals to determine if the repeater system is in oscillation.

31. (New) An apparatus for detecting oscillation in a repeater system comprising:  
a wireless communication device circuit embedded in a repeater, wherein the wireless communication device circuit is configured to process communication signals from a base station to measure signal quality of the communication signals; and  
means for using the communication signals processed at the wireless communication device circuit to determine if the repeater system is in oscillation if the signal quality meets a certain criteria.
32. (New) The apparatus of claim 31, wherein the means for using is configured to determine oscillation if the signal quality degrades below a certain level.
33. (New) The apparatus of claim 31, wherein the means for using is configured to determine oscillation if the signal quality degrades from a level that existed before the repeater was used.
34. (New) The apparatus of claim 31, wherein the means for using the wireless communication device circuit comprises:  
means for obtaining signal to noise ratio value to measure the signal quality.
35. (New) The apparatus of claim 31, wherein the means for using the wireless communication device circuit comprises:  
means for using the wireless communication device circuit to estimate at least one open loop power control parameter;



means for establishing a communication link from the wireless communication device circuit to a base station using the estimated open loop power control parameter;

means for receiving at least one closed loop power control command from the base station; and

means for determining oscillation if the closed loop power control command is greater than a certain amount.

36. (New) The apparatus of claim 35, wherein the means for using the wireless communication device circuit is configured to estimate at least a required transmit power to complete the call, wherein the means for receiving closed loop power control commands comprises means for receiving at least power adjustment information, and wherein the means for determining oscillation is configured to determine oscillation if the power adjustment information is greater than a certain amount.

37. (New) The apparatus of claim 31, further comprising:  
means for reducing gain of repeater if the repeater system is in oscillation.

38. (New) The apparatus of claim 31, wherein the means for using uses a ratio of energy of a chip of a pilot signal to total interference ( $E_c/I_o$ ) obtained from the processed communication signals to determine if the repeater system is in oscillation.

39. (New) An apparatus for detecting oscillation in a repeater system comprising:  
a wireless communication device (WCD) configured to detect if the repeater system is in oscillation based on communication signals from a base station processed at the WCD, wherein

the WCD is configured to measure signal quality of the communication signals from the base station, and to determine oscillation if the signal quality meets a certain criteria; and

a processor coupled to the WCD, configured to reduce the gain of the repeater system if the repeater system is in oscillation.

40. (New) A computer-readable medium comprising instructions, which, when executed by a machine, cause the machine to perform operations, the instructions comprising:

program code to process communication signals from a base station in a wireless communication device circuit embedded in a repeater;

program code to measure signal quality of the communication signals from the base station; and

program code to determine the repeater system is in oscillation if the signal quality meets a certain criteria.